REMARKS

I. Prosecution History.

The application as filed contained 56 claims with claims 57 and 58 being added in a subsequent preliminary amendment. In response to the Restriction Requirement (Paper No. 6) dated August 13, 2002, claims 17, 20-22, 32-40 and 57-58 (in part) were elected and claims 1-16, 18-19, 23-31, and 41-56 were withdrawn from consideration. Claims 17, 32, and 57-58 have been amended herein. In the Official Action (Paper No. 8) dated September 30, 2002, claims 17, 20-21 and 57 were rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent 4,705,799 to Gregory et al. (hereafter "Gregory"). In addition, the examiner objected to claims 22, 32-40 and 58 for containing non-elected subject matter.

Applicants respectfully traverse the rejection.

II. Explanation of amendments.

The undersigned agent wishes to thank the Examiner for the telephone discussion of December 19, 2002 clarifying the narrowing of the generic concept from the elected species. In accordance with the examiner's instructions, amendments to the claims were made in accordance to the applicant's elected species where they conflicted with the examiner's generic concept. These amendments are fully supported throughout the specification as originally filed. Should the Patent Office wish to discuss the foregoing, or any matter of form in an effort to advance this application toward allowance, the Patent Office is urged to telephone the undersigned at the indicated number.

In this amendment, support for replacing the terms "arylsulfonyl" and "alkylsulfonyl" with the terms "arylsulfonyloxy" and "alkylsulfonyloxy", respectively, find support throughout the application (see especially, page 14, lines 16-17) and is intended to reflect the correct chemical nomenclature for these groups.

Additional amendments to claims 17, 32, 57, and 58 find support throughout the application and are intended to exclude non-elected subject matter in accordance with the Examiner's restriction requirement. Applicant hereby states that the amendments do not represent new matter. The Applicants do not intend by these or any other amendments to abandon the subject matter of any claim as originally presented, and reserve the right to pursue such subject matter in other applications, such as continuing applications and divisional applications. Attached hereto is a marked-up version of the changes made to the

claims by the current amendment. The attached pages are captioned "**Version With Markings To Show Changes Made.**" Also attached is a clean copy of the claims presently pending in the instant application.

III. The Patent Office's rejection of claims 17, 20-21, and 57 under 35 U.S.C. §102(b), for being anticipated by Gregory should be withdrawn.

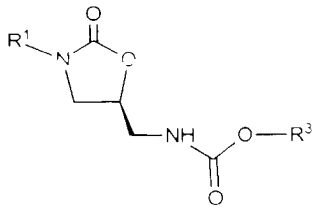
At page 3, paragraph 5 of the Office action, the Examiner rejected claims 17, 20-21 and 57 under under 35 USC §102(b), alleging that:

> Gregory et al (US Pat No. 4,705,799) also disclose the synthesis of many oxazolidinyl benzene derivatives, one of which anticipates the instantly claimed compound (STN International, CAPLUS database, page 5, document number, 110, 8198. See also Example 84, column 43 and column 8, lines 5-37 of '799)."
>
> (Office action at page 3.)

Applicants have studied this reference and respectfully traverse in view of the reasons set forth below.

A. The subject matter of the claims.

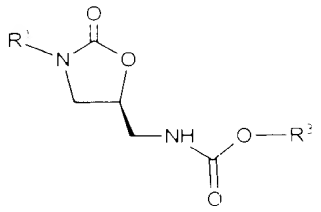
Amended claim 17 now specifies an (S)-intermediate having a general structural formula:



wherein R^1 is an **substituted** aryl group, and R^3 is C_1-C_{10} alkyl, or a salt or hydrate thereof, **provided that when R^3 is C_1-C_4 alkyl or C_7-C_{11} araalkyl and R^1 is phenyl, the substituents on R^1 are not hydrogen, monofluoro, monochloro, monobromo, or mononitro substituent, alone or in combination with a 4-methylsulfonyl, 4-methylthio,**

4-methylsulfinyl, 4-sulfamyl, 4-isopropyl, 4-(C_1-C_3alkyl)carbonyl, 4-ethyl, 4-(1-hydroxyethyl), or 4-acetyloxyacetyl, substituent. (Emphasis added).

Claims 20-21 which depend from claim 17 therefore also include this limitation. Claim 57 as amended no longer relates to oxazolidinones having a general structural formula:



wherein R^1 is an aryl group, optionally substituted, or a salt or hydrate thereof.

B. U.S. Patent 4,705,799, Gregory et al. does not disclose the subject matter of the claims.

The compounds of the present invention as claimed are not anticipated by the cited art. Gregory, relied upon by the Examiner, neither discloses nor suggests the subject matter of the amended claims which now define compounds that are patentably distinct from the oxazolidinones of the '799 patent. The Gregory patent is directed to (l)-N-[(3-phenyl)-2-oxooxazoldin-5-ylmethyl]carbamic acid, C_1-C_4 alkyl and C_7-C_{11} araalkyl esters, when the 3-phenyl is substituted with a **hydrogen, monofluoro, monochloro, monobromo, or mononitro substituent, alone or in combination with a 4-methylsulfonyl, 4-methylthio, 4-methylsulfinyl, 4-sulfamyl, 4-isopropyl, 4-(C_1-C_3alkyl)carbonyl, 4-ethyl, 4-(1-hydroxyethyl), or 4-acetyloxyacetyl substituent**. (See Col. 7, line 1- Col. 8, line 43; and Examples 45, column 42). Example 84 which the Examiner cites is indicated to be d,l mixture of compounds. Applicants' amended claim 17 now defines (l)-N-[(3-substitutedaryl)-2-oxooxazoldin-5-ylmethyl]carbamic acid esters that are not (l)-N-[(3-phenyl)-2-oxooxazoldin-5-ylmethyl]carbamic acid, C_1-C_4 alkyl and C--C_{11} araalkyl esters, where the 3-phenyl is substituted with a hydrogen, monofluoro, monochloro, monobromo, or mononitro substituent, alone or in combination with a 4-methylsulfonyl, 4-methylthio, 4-methylsulfinyl, 4-sulfamyl, 4-isopropyl, 4-(C_1-C_3alkyl)carbonyl, 4-ethyl, 4-(1-hydroxyethyl), or 4-acetyloxyacetyl substituent. Therefore, it is submitted that the rejection of claim 17 and its dependant claims 20 and 21 under 35 U.S.C. §102(b) as being anticipated by Gregory should be withdrawn.

Additionally, applicants' claim 57 as originally filed has been amended to exclude the (1)-N-[(3-phenyl)-2-oxooxazoldin-5-ylmethyl]carbamic acid, C_1-C_4 alkyl and C_7-C_{11} araalkyl esters, where the 3-phenyl is substituted with a hydrogen, monofluoro, monochloro, monobromo, or mononitro substituent, alone or in combination with a 4-methylsulfonyl, 4-methylthio, 4-methylsulfinyl, 4-sulfamyl, 4-isopropyl, 4-(C_1-C_3alkyl)carbonyl, 4-ethyl, 4-(1-hydroxyethyl), or 4-acetyloxyacetyl substituent recited in Gregory. Therefore, it is submitted that amended claim 57 is novel and patentable over Gregory and the rejection of claim 57 under 35 U.S.C. §102(b) as being anticipated by Gregory should also be withdrawn.

In summary, for the reasons set forth above, it is submitted that amended claims 17, 20-21, and 57 are not anticipated by Gregory and that the rejection of claims 17, 20-21, and 57 under 35 U.S.C. §102(b) should be withdrawn.

IV. The Patent Office's objection to claims 22, 32-40, and 58 for containing non-elected subject matter should be withdrawn.

At page 4, paragraph 2 of the Office action, the Examiner objected to claims 22, 32-40 and 58 for containing non-elected subject matter stating that:

> Claims drawn solely to the elected invention as identified supra, would appear allowable. The claims must be amended to exclude non-elected subject matter and within the limit of the elected compound and species and all the dependant claims also, must be amended to satisfy the restriction requirement and election of species in order to place the case in condition for allowance."
>
> (Office action at page 3.)

In the Applicant's response to the restriction requirement, the Applicant's elected the following species:

> The intermediate wherein R^1 is substituted aryl and R^3 is C_1-C_{10} alkyl; the carbamate wherein R^2 is C_1-C_{20} alkyl; secondary alcohol wherein R^3 is C_1-C_{10}alkyl and X is halogen; the ester wherein R^3 is C_1-C_{10}alkyl, R^4 is C_1-C_5alkyl, and X is halogen; and the epoxide wherein R^3 is C_1-C_{10} alkyl.

In the Office Action of September 30, 2002, the Examiner established a modified generic concept based on Applicant's election of species without giving further reasons for restriction. The modified generic concept was defined as:

A compound wherein R^1 is optionally substituted aryl except hetero ring system or atom;

R^2 is as claimed except hetero ring system or atom; and

R^3 is as claimed. (Office action at page 3-4).

In the undersigned agent's telephone discussion of December 19, 2002 with the Examiner, the Examiner clarified that the Applicant's should base their amendments on the Applicant's elected species where they conflict with the stated generic concept. Amended claims 32 and 58 no longer contain subject matter wherein R^2 is a hetero ring system or an atom. Claims 22 and 33-40 are within this elected species/generic concept without further amendment. It is submitted that the claims are now of proper form and scope for allowance and the applicants respectfully request that this objection be withdrawn.

CONCLUSION

It is submitted that the claims are now of proper form and scope for allowance and the applicants respectfully request that the rejection and objection be withdrawn. An early and favorable action on the merits is respectfully requested. Should the examiner wish to discuss the foregoing, or any matter of form in an effort to advance this application toward allowance, the examiner is urged to telephone the undersigned at the indicated number.

Respectfully submitted,

MARSHALL GERSTEIN & BORUN
6300 Sears Tower
233 South Wacker Drive
Chicago, Illinois 60606-6402

Date: December 30, 2002

Mark H. Hopkins, Ph.D.

Reg. No. 44,775

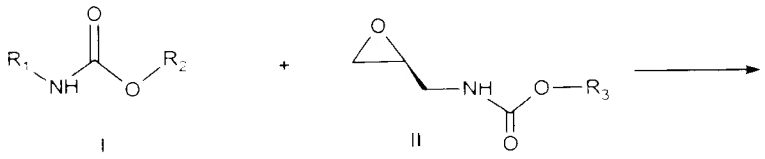
"Version With Markings To Show Changes Made."

In the Specification:

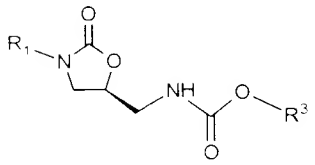
Please replace the paragraph beginning at page 6, line 26, with the following amended paragraph:

-- The present invention is directed to a method of synthesizing oxazolidinones and intermediate compounds used in the synthesis. As shown in Schemes 1, 2, and 3 below, one aspect of the present invention is to provide an

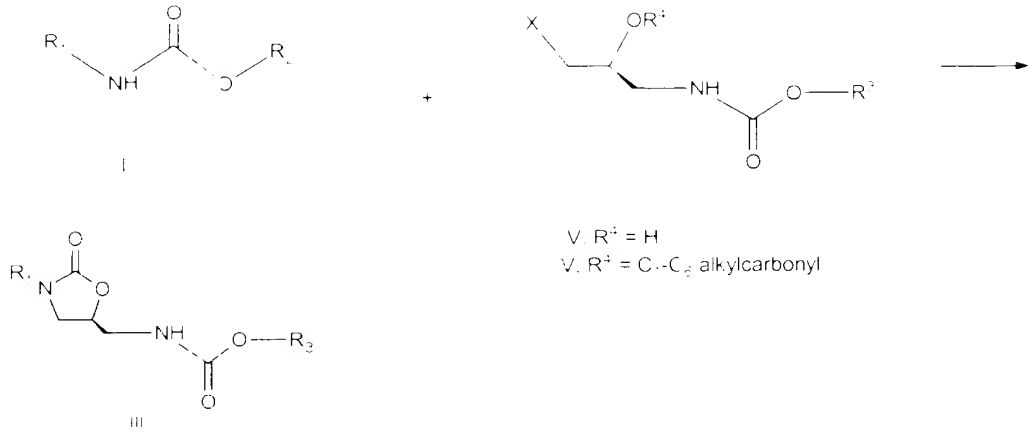
Scheme 1



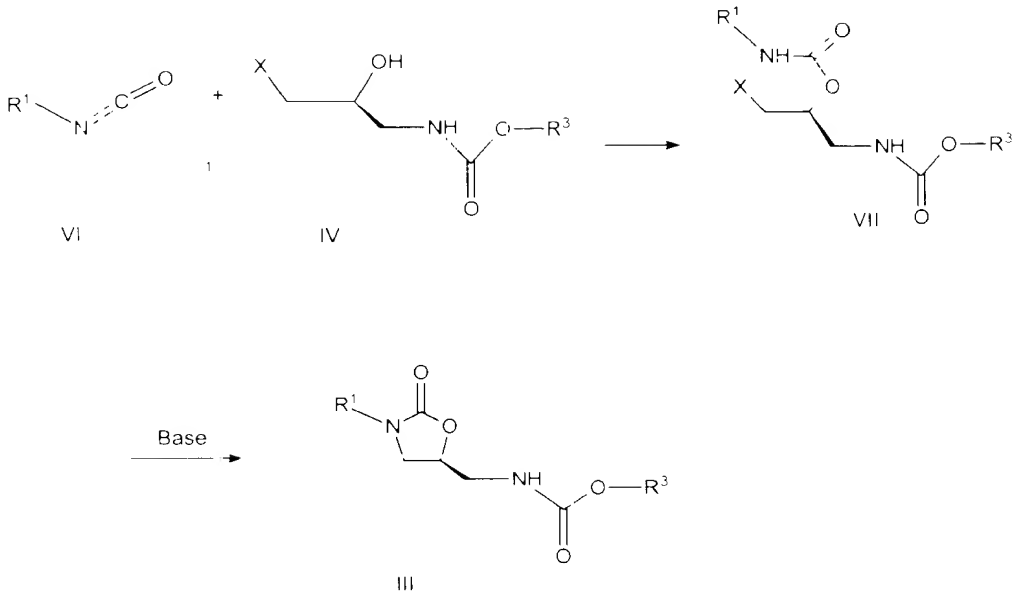
I II



Scheme 2



Scheme 3



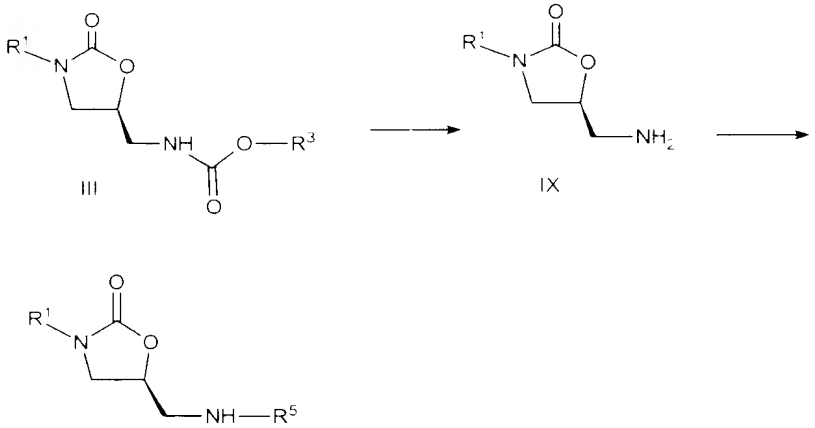
S)-oxazolidinone alkylcarbamoyl intermediate of structural formula (III), an (S)-secondary alcohol of structural formula (IV), and an (S)-ester protected alcohol of structural formula (V), or a salt or hydrate thereof or acceptable salts, hydrates, or pro-compounds thereof, wherein R^1 is optionally substituted aryl; R^2 is selected from the group consisting of C_1-C_{20} alkyl, C_3-C- cycloalkyl, aryl optionally substituted with one or two C_1-C_3 alkyl or halogen

groups, allyl, 3-methylallyl, 3,3-dimethylallyl, vinyl, styrylmethyl, benzyl optionally substituted on the aryl with one or two Cl, C_1-C_4 alkyl, nitro, cyano, or trifluoromethyl groups, 9-fluorenylmethyl, trichloromethylmethyl, 2-trimethylsilylethyl, phenylethyl, 1-adamantyl, diphenylmethyl, 1,1-dimethylpropargyl, 2-furanylmethyl, isobornyl, and hydrogen; R^3 is C_1-C_{10} alkyl; R^4 is H or C_1-C_5 alkylcarbonyl; and X is halogen, alkylsulfonyloxy, or arylsulfonyloxy. --

Please replace the paragraph beginning at page 11, line 16, with the following amended paragraph:

-- An additional aspect of the present invention, as shown in Scheme 7, is

Scheme 7



X, R^5 = C_1-C_6 alkylcarbonyl or C_1-C_6 cycloalkylcarbonyl
XI, R^5 = C_1-C_6 alkylthiocarbonyl or C_1-C_6 cycloalkylthiocarbonyl

to provide a process for the production of an (S)-3,5-disubstituted-oxazolidinone of the structural formula (X) and (XI) which comprises (a) contacting a carbamate of structural formula (I) with an (S)-protected alcohol of formula (V) in the presence of a lithium cation and a base whose conjugate acid has a pKa of greater than about 8 to provide an (S)-protected-oxazolidinone of the structural formula (III) (see Scheme 2), (b) contacting the reaction product of step (a) with aqueous acid to produce an (S)-oxazolidinone free amine of structural formula (IX), and (c) contacting the product of step (b) with a base, such as a tri(C_1-C_5 alkyl)amine, and an acylating or thioacylating agent selected from the group

consisting of (i) an acid anhydride of the structural formula $O(R^5)_2$, (ii) an activated acid of the structural formula R^5X to provide (X) or (iii) a dithioester of the structural formula $R^5S(C=S)R^5$ to provide (XI), wherein R^5 is C_1-C_6 alkylcarbonyl, C_1-C_6 cycloalkylcarbonyl, C_1-C_6 alkylthiocarbonyl, or C_1-C_6 cycloalkylthiocarbonyl, and X is halogen, alkylsulfonyloxy, or arylsulfonyloxy. --

Please replace the paragraph beginning at page 13, line 4, with the following amended paragraph:

-- A further aspect of the present invention is to provide a one pot process for the production of an (S)-oxazolidinone of structural formula (X) and (XI) which comprises (a) contacting a carbamate of formula (I) with either an (S)-t-butylcarbamyl secondary alcohol of the structural formula (IV) or an (S)-t-butylcarbamyl epoxide of the structural formula (II), in the presence of a lithium cation and a base whose conjugate acid has a pKa of greater than about 8, (b) contacting the product of step (a) with aqueous acid, and (c) contacting the reaction product of step (b) with a base, such as a tri(C_1-C_5 alkyl)amine, and and an acylating or thioacylating agent selected from the group consisting of (i) an acid anhydride of the structural formula $O(R^5)_2$, (ii) an activated acid of the structural formula R^5X, or (iii) a dithioester of the structural formula $R^5S(C=S)R^5$, wherein R^5 is C_1-C_6 alkylcarbonyl, C_1-C_6 cycloalkylcarbonyl, C_1-C_6 alkylthiocarbonyl, or C_1-C_6 cycloalkylthiocarbonyl, and X is halogen, alkylsulfonyloxy, or arylsulfonyloxy. --

Please replace the paragraph beginning at page 14, line 16, with the following amended paragraph:

-- The term "alkylsulfonyloxy " is defined as R-SO_3-, where R is alkyl. --

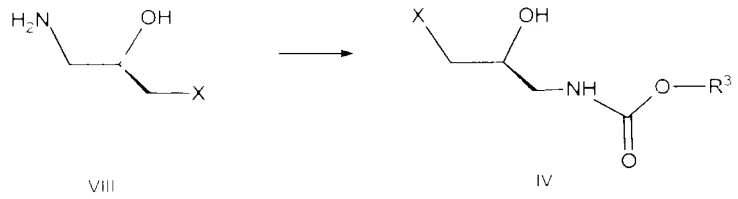
Please replace the paragraph beginning at page 14, line 17, with the following amended paragraph:

-- The term "arylsulfonyloxy " is defined as R-SO_3-, where R is aryl. --

Please replace the paragraph beginning at page 21, line 14, with the following amended paragraph:

-- The three carbon nitrogen containing fragments, i.e., (S)-secondary alcohol (IV), (S)-epoxide (II), and (S)-ester (V), can be produced by different routes, as illustrated in Schemes 4, 5, and 6. Scheme 4 illustrates a process of preparing a

Scheme 4

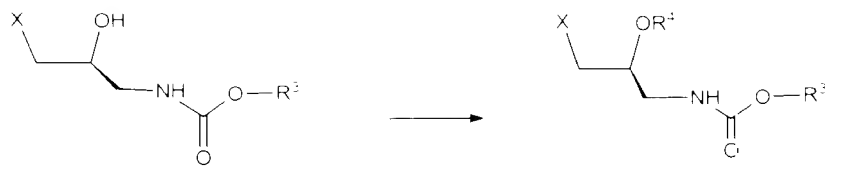


(S)-3-carbon amino alcohol (IV) from an (S)-amino alcohol (VIII) and a dialkyldicarbonate. For the (S)-amino alcohol (VIII), X can be halogen, alkylsulfonyloxy, or arylsulfonyloxy. A preferred X is Cl. The (S)-amino alcohols (VIII) are known to those skilled in the art or can readily be prepared from known compounds by methods disclosed in WO 99/24393 from commercially available S-epichlorohydrin. The (S)-amino alcohol can be isolated in crystalline form after recrystallization. The reaction of dialkyldicarbonate and the (S)-amino alcohol (VIII) is performed as set forth in Example 3. --

Please replace the paragraph beginning at page 23, line 1, with the following amended paragraph:

-- Scheme 5 illustrates a process for converting an (S)-carbamoyl alcohol

Scheme 5



IV

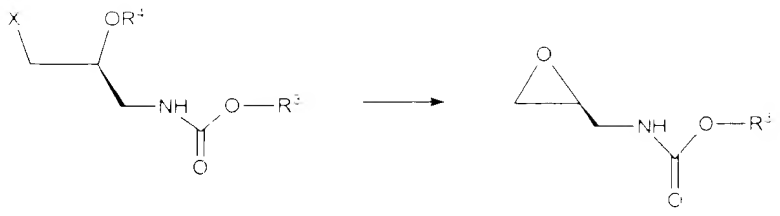
V. R^4 = C_1-C_5 alkylcarbonyl

(IV) to a corresponding (S)-secondary ester protected alcohol (V). To convert an (S)-carbamoyl alcohol (IV) to a corresponding (S)-secondary ester/protected alcohol (V), the (S)-carbamoyl alcohol (IV) is reacted with an appropriate acylating reagent, such as an acyl halide or acyl anhydride, under acylation reaction conditions well known to those skilled in the art. The (S)-secondary protected-alcohol can be isolated in crystalline form after recrystallization. For example, an (S)-carbamoyl alcohol (IV) can be transformed to a corresponding (S)-secondary ester/protected alcohol (V) by reaction with acetic anhydride in triethylamine, as is set forth in Example 4. For the (S)-3-carbon amino alcohol (IV), X can be halogen, alkylsulfonyloxy, or arylsulfonyloxy, and preferably is Cl. For the corresponding corresponding (S)-secondary ester/protected alcohol (V), R^4 is C_1-C_5 alkylcarbonyl and preferably is acetyl. It is preferred that the acylating reagent be selected from the group consisting of an acid anhydride of the formula $O(R^5)_2$, wherein R^5 is C_1-C_6 alkylcarbonyl, or an activated acid of the formula R^5 X, wherein X can be halogen, alkylsulfonyloxy or arylsulfonyloxy and preferably is -Cl or -Br, and used in conjunction with base, preferably a tri(C_1-C_5 alkyl)amine. It is more preferred that R^5 is acetyl and X is -Cl. Specifically, the more preferred acylating reagent is an acyl anhydride, and it is most preferred that the acyl anhydride is acetic anhydride. --

Please replace the paragraph beginning at page 23, line 25, with the following amended paragraph:

-- Scheme 6 shows a process of preparing a (S)-epoxide (II) from either

Scheme 6



IV, R^4 = H
V R^4 = C_1-C_5 alkylcarbonyl

II

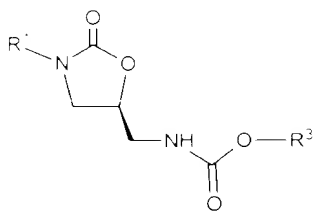
an (S)-3-carbon amino alcohol (IV) or an (S)-secondary ester protected alcohol (V). The (S)-epoxide (II) can be obtained by reaction of an (S)-secondary ester protected alcohol (V) with a base, such as potassium or lithium t-butoxide, in a solvent, such as methanol. The (S)-epoxide can be isolated in crystalline form after chromatography. An (S)-epoxide (II) can be produced from a corresponding (S)-secondary alcohol (IV) by reaction with lithium t-butoxide in methanol at 20°C, as is set forth in Example 5. For an (S)-secondary alcohol (IV) or (S)-secondary ester/protected alcohol (V), it is preferred that R^4 is acetyl. For either an (S)-3-carbon amino alcohol (IV) or (S)-secondary ester/protected alcohol (V), X can be halogen, alkylsulfonyloxy, or arylsulfonyloxy, and preferably is Cl. --

Please replace the paragraph beginning at page 25, line 10, with the following amended paragraph:

-- Alternatively, the transformation from compound (III) to compound (X) or (XI) can be accomplished as a one pot process without isolating amine (IX). It is preferred that the acylating or thioacylating agent is selected from the group consisting of an acid anhydride of the structural formula $O(R^5)_2$, an activated acid of the structural formula R^5X, and a dithioester of the structural formula $R^5S(C=S)R^5$, wherein R^5 is C_1-C_6 alkylcarbonyl, C_1-C_6 cycloalkylcarbonyl, C_1-C_6 alkylthio-carbonyl, or C_1-C_6 cycloalkylthiocarbonyl, and X is halogen, alkylsulfonyloxy, or arylsulfonyloxy. It is preferred that the acylating agent or thioacylating agent is used in conjunction with a base, such as a tri(C_1-C_5 alkyl)amine. It is more preferred that R^5 is acetyl and X is Cl. Specifically, it is more preferred that the acylating reagent is an acyl anhydride, and most preferably the acyl anhydride is acetic anhydride. --

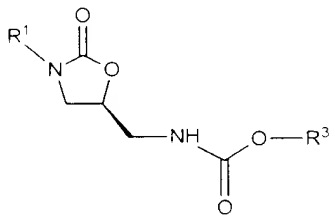
In the claims:

17. (Amended) An (S)-intermediate having a general structural formula:



wherein R^1 is an substituted aryl group, [optionally substituted,] and R^3 is C_1-C_{10} alkyl, or a salt or hydrate thereof, provided that when R^3 is C_1-C_4 alkyl or C_7-C_{11} araalkyl and R^1 is phenyl, the substituents on R^1 are not hydrogen, monofluoro, monochloro, monobromo, or mononitro substituent, alone or in combination with a 4-methylsulfonyl, 4-methylthio, 4-methylsulfinyl, 4-sulfamyl, 4-isopropyl, 4-(C_1-C_3alkyl)carbonyl, 4-ethyl, 4-(1-hydroxyethyl), or 4-acetyloxyacetyl substituent.

32. (Amended) A method of preparing an (S)-oxazolidinone having a general structural formula:



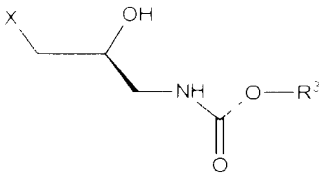
wherein R^3 is C_1-C_{10} alkyl, and R^1 is optionally substituted aryl, or a salt or hydrate thereof, comprising contacting a carbamate having a general structural formula:

$$R^1\text{-NH-CO-O-CH}_2\text{-}R^2$$

wherein R^2 is selected from the group consisting of C_1-C_{20} alkyl, C_3-C-cycloalkyl, [aryl] phenyl optionally substituted with one or two C_1-C_3 alkyl or halogen groups, allyl, 3-methylallyl, 3,3-dimethylallyl, vinyl, styrylmethyl, benzyl optionally substituted on the phenyl with one or two Cl, C_1-C_4 alkyl, nitro, cyano, or trifluoromethyl

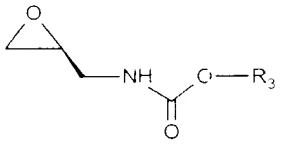
groups, 9-fluorenylmethyl, trichloromethylmethyl, 2-trimethylsilylethyl, phenylethyl, 1-adamantyl, diphenylmethyl, 1,1-dimethylpropargyl, [2-furanylmethyl,] and isobornyl[, and hydrogen,] or a salt or hydrate thereof, with

i) a secondary alcohol having a general structural formula:

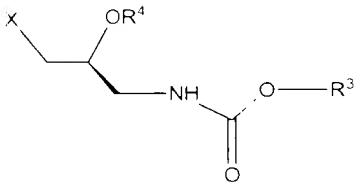


wherein X is halogen, alkylsulfonyloxy, or arylsulfonyloxy, or a salt or hydrate thereof;

ii) an (S)-epoxide having a general structural formula:

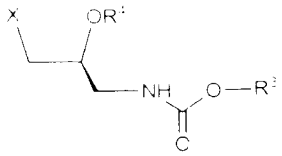


or iii) an (S)-ester having a general structural formula:

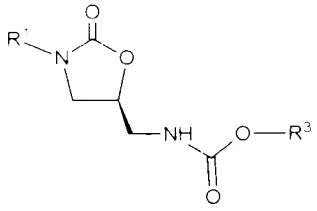


wherein R^4 is C_1-C_5 alkylcarbonyl; in the presence of a lithium cation and a base whose conjugate acid has a pKa of greater than about 8.

57. (Amended) A compound having a the S-configuration of general structural formula:

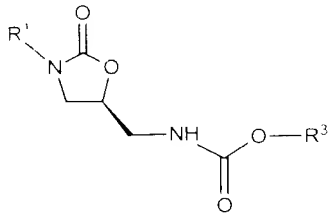


wherein R^3 is C_1-C_{10} alkyl, R^4 is hydrogen or C_1-C_5 alkylcarbonyl, X is halogen, alkylsulfonyloxy, arylsulfonyloxy, or taken together with OR^4 to form an epoxide [or an oxazolidinone having a general structural formula:



wherein R^1 is an aryl group, optionally substituted, or a salt or hydrate thereof].

58. (Amended) A method of preparing an (S)-oxazolidinone having a general structural formula:



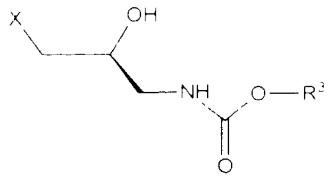
wherein R^3 is C_1-C_{10} alkyl, and R^1 is optionally substituted aryl, or a salt or hydrate thereof, comprising contacting a carbamate having a general structural formula:

$$R^1\text{-NH-CO-O-CH}_2\text{-}R^2$$

wherein R^2 is selected from the group consisting of C_1-C_{20} alkyl, C_3-C-cycloalkyl, [aryl] phenyl optionally substituted with one or two C_1-C_3 alkyl or halogen groups, allyl, 3-methylallyl, 3,3-dimethylallyl, vinyl, styrylmethyl, benzyl optionally substituted on the phenyl with one or two Cl, C_1-C_4 alkyl, nitro, cyano, or trifluoromethyl groups, 9-fluorenylmethyl, trichloromethylmethyl, 2-trimethylsilylethyl, phenylethyl, 1-

adamantyl, diphenylmethyl, 1,1-dimethylpropargyl[, 2-furanylmethyl], and isobornyl[, and hydrogen], or a salt or hydrate thereof, with

i) a secondary alcohol having a general structural formula:

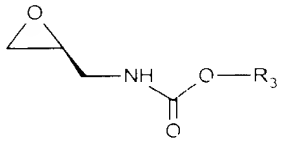


wherein X is halogen, alkylsulfonyloxy, or arylsulfonyloxy, or a salt or hydrate thereof made by the process comprising contacting an (S)-3-carbon amino alcohol having a general structural formula:

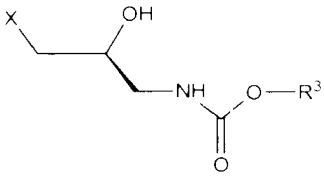
$$X\text{-}CH_2\text{-}C^{*(S)}H(OH)\text{-}CH_2\text{-}NH_3^+$$

with a base and an carbonylating agent selected from the group consisting of a haloformate having a formula $R^3O\text{-}CO\text{-}X$ and a dialkyldicarbonate having a formula $R^3OCO_2R^3$;

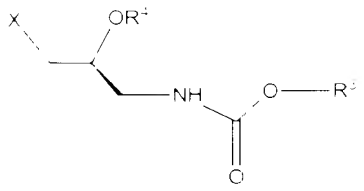
ii) an (S)-epoxide having a general structural formula:



made by the process comprising contacting an (S)-secondary alcohol having a general structural formula:

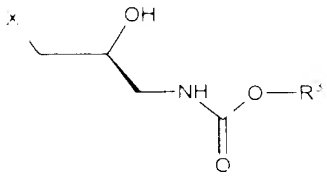


with a base and an acylating agent selected from the group consisting of an acid anhydride having a formula $O(R^4)_2$, and an activated acid having a formula R^4X; or iii) an (S)-ester having a general structural formula:



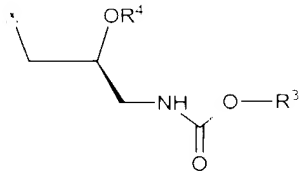
wherein R^4 is C_1-C_5 alkylcarbonyl made by the process comprising contacting

a) an (S)-secondary alcohol having a general structural formula:



wherein X is a halogen, alkylsulfonyloxy, or arylsulfonyloxy; or

b) an (S)-ester having a general structural formula:

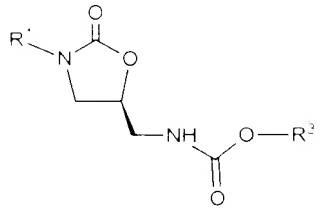


wherein R^4 is C_1-C_5 alkylcarbonyl, with a lithium cation and a base whose conjugate acid has a pKa of greater than about 8;

in the presence of a lithium cation and a base whose conjugate acid has a pKa of greater than about 8.

APPENDIX OF CLAIMS PENDING

17. (Amended) An (S)-intermediate having a general structural formula:



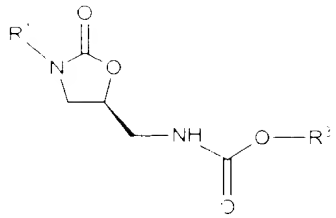
wherein R^1 is an substituted aryl group and R^3 is C_1-C_{10} alkyl, or a salt or hydrate thereof, provided that when R^3 is C_1-C_4 alkyl or C_7-C_{11} araalkyl and R^1 is phenyl, the substituents on R^1 are not hydrogen, monofluoro, monochloro, monobromo, or mononitro substituent, alone or in combination with a 4-methylsulfonyl, 4-methylthio, 4-methylsulfinyl, 4-sulfamyl, 4-isopropyl, 4-(C_1-C_3alkyl)carbonyl, 4-ethyl, 4-(1-hydroxyethyl), or 4-acetyloxyacetyl substituent.

20. An (S)-intermediate of claim 17 where R^3 is is C_4-C_7 tertiary alkyl.

21. An (S)-intermediate of claim 20 where R^3 is tertiary butyl.

22. An (S)-intermediate of claim 17 having a name (S)-N-[[3-(3-Fluoro-4-morpholinylphenyl)-2-oxo-5-oxazolidinyl]methyl](tert-butoxy)carbamide.

32. (Amended) A method of preparing an (S)-oxazolidinone having a general structural formula:

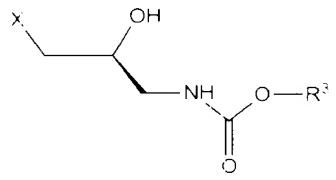


wherein R^3 is C_1-C_{10} alkyl, and R^1 is optionally substituted aryl, or a salt or hydrate thereof, comprising contacting a carbamate having a general structural formula:

$$R^1\text{-NH-CO-O-CH}_2\text{-}R^2$$

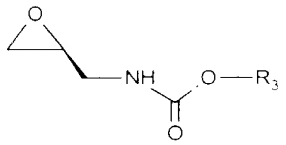
wherein R^2 is selected from the group consisting of C_1-C_{20} alkyl, C_3-C_7 cycloalkyl, phenyl optionally substituted with one or two C_1-C_3 alkyl or halogen groups, allyl, 3-methylallyl, 3,3-dimethylallyl, vinyl, styrylmethyl, benzyl optionally substituted on the phenyl with one or two Cl, C_1-C_4 alkyl, nitro, cyano, or trifluoromethyl groups, 9-fluorenylmethyl, trichloromethylmethyl, 2-trimethylsilylethyl, phenylethyl, 1-adamantyl, diphenylmethyl, 1,1-dimethylpropargyl, and isobornyl, or a salt or hydrate thereof, with

i) a secondary alcohol having a general structural formula:

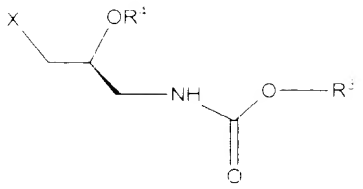


wherein X is halogen, alkylsulfonyloxy, or arylsulfonyloxy, or a salt or hydrate thereof;

ii) an (S)-epoxide having a general structural formula:



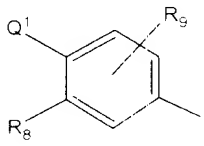
or iii) an (S)-ester having a general structural formula:



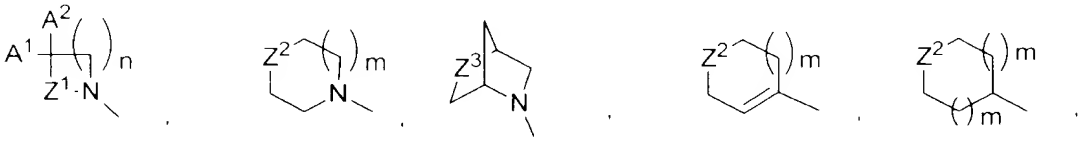
wherein R^4 is C_1-C_5 alkylcarbonyl; in the presence of a lithium cation and a base whose conjugate acid has a pKa of greater than about 8.

33. The method of claim 32 further comprising isolating the (S)-oxazolidonone in a crystalline form.

34. The method of claim 32 wherein R^1 is:



wherein Q^1 is: $R^{10}R^{11}N$,



or Q^1 and R^8 taken together are dihydropyrrolidine, optionally substituted with R^{12};

Z^1 is $CH_2(CH_2)_p$, $CH(OH)(CH_2)_p$, or C(O);

Z^2 is $(O)_pS$, O, or $N(R^{13})$;

Z^3 is $(O)_pS$ or O;

A^1 is H or CH_3;

A^2 is selected from the group consisting of:

a) H,

b) HO,

c) CH_3,

d) CH_3O,

e) $R^{14}OCH_2-C(O)NH$,

f) $R^{15}OC(O)NH$,

g) $(C_1$-$C_3)$alkoxycarbonyl,

h) $HOCH_2$,

i) CH_3ONH,

j) $CH_3C(O)$,

k) $CH_3C(O)CH_2$,

l) $CH_3C(OCH_2CH_2O)$, and

m) $CH_2C(OCH_2CH_2O)CH_2$,

or A^1-C-A^2 taken together are CH_3-$C(OCH_2CH_2O)$, C(O), or $C(=NR^{22})$;

R^8 is H or F, or is taken together with Q^1 as above;

R^9 is H or F;

R^{10} and R^{11} are taken together with the N atom to form a 3,7-diazabicyclo[3.3.0]octane, pyrrole, pyrazole, imidazole, 1,2,3-triazole, 1,2,4-triazole, morpholine or a piperazine group, optionally substituted with R^{13};

R^{12} is selected from the group consisting of:

a) $CH_3C(O)$-,

b) HC(O)-,

c) $Cl_2CHC(O)$-,

d) $HOCH_2C(O)$-,

e) CH_3SO_2-,

f) $F_2CHC(O)$-,

g) $H_3CC(O)OCH_2C(O)$-,

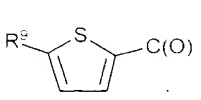
h) $HC(O)OCH_2C(O)$-,

i) $R^{21}C(O)OCH_2C(O)$-,

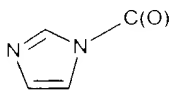
j) $H_3CCHCH_2OCH_2C(O)$-,

k) $benzylOCH_2C(O)$-,

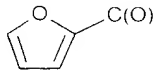
l)-m)



.



, and



R^{13} is selected from the group consisting of:

a) $R^{14}OC(R^{16})(R^{17})C(O)$,

b) $R^{15}OC(O)$,

c) $R^{18}C(O)$,

d) $H_3CC(O)(CH_2)_2C(O)$,

e)$R^{19}SO_2$,

f) $HOCH_2C(O)$,

g) $R^{20}(CH_2)_2$,

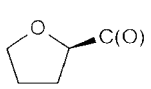
h) $R^{21}C(O)OCH_2C(O)$,

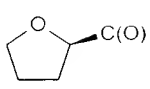
i) $(CH_3)_2NCH_2C(O)NH$,

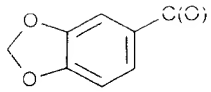
j) $NCCH_2$,

k) F_2CHCH_2,

l)-m







and

R^{14} is H, CH_3, benzyl, or $CH_3C(O)$;

R^{15} is $(C_1$-$C_3)$alkyl, aryl, or benzyl;

R^{16} and R^{17}, independently, are H or CH_3;

R^{18} is selected from the group consisting of:

a) H ,

b) $(C_1$-$C_4)$alkyl,

c) aryl$(CH_2)_m$,

d) ClH_2C ,

e) Cl_2HC ,

f) FH_2C ,

g) F_2HC , and

h) $(C_3$-$C_6)$cycloalkyl;

R^{19} is selected from the group consisting of:

a) CH_3,

b) CH_2Cl,

c) $CH_2CH{=}{=}CH_2$,

d) aryl, and

e) CH_2CN;

R^{20} is OH, CH_3O , or F;

R^{21} is:

a) CH_3 ,

b) $HOCH_2$,

c) aniline, or

d) $(CH_3)_2N\text{-}CH_2$,

R^{22} is selected from the group consisting of:

a) HO-

b) CH_3O-

c) H_2N-

d) $CH_3OC(O)O$,

e) $CH_3C(O)OCH_2C(O)O$,

f) aryl $CH_2OCH_2C(O)O$,

g) $HO(CH_2)_2O$,

h) $CH_3OCH_2O(CH_2)_2O$–, and

i) CH_3OCH_2O–;

m is 0 or 1;

n is 1-3;

p is 0-2; and

aryl is unsubstituted phenyl or phenyl unsubstituted with one of the following:

a) F,

b) Cl,

c) OCH_3,

d) OH,

e) NH_2,

f) $(C_1\text{-}C_4)$alkyl,

g) $OC(O)OCH_3$, or

h) NO_2;

and protected forms thereof.

35. The method of claim 34 wherein R^1 is selected from the group consisting of 3-fluoro-4-[4-(benzyloxycarbonyl)-1- piperazinyl]phenyl, 3-fluoro-4-(4-morpholinyl)phenyl, 4-(1,1-dioxohexahydro-1λ^6-thiopyran-4-yl)-3-fluorophenyl, 3-fluoro-

4-tetrahydro-2H-thiopyran-4-ylphenyl, 3,5-difluoro-4-(4-thiomorpholinyl)phenyl, 3-fluoro-4-(3-thietanyl)phenyl, and 4-(1,1-dioxido-3-thietanyl)-3-fluorophenyl.

36. The method of claim 32 where R^3 is C_4-C- tertiary alkyl.

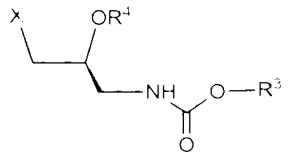
37. The method of claim 36 where R^3 is tertiary butyl.

38. The method of claim 32 where R^2 is methyl.

39. The method of claim 32 where X is Cl.

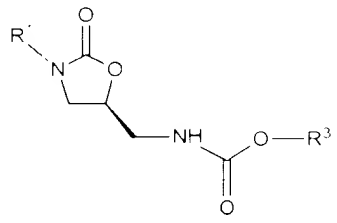
40. The method of claim 32 wherein the (S)-oxazolidinone is (S)-N-[[3-(3-fluoro-4-morpholinylphenyl)-2-oxo-5-oxazolidinyl]methyl]t-butoxycarbamide.

57. (Amended) A compound having a the S-configuration of general structural formula:



wherein R^3 is C_1-C_{10} alkyl, R^4 is hydrogen or C_1-C_5 alkylcarbonyl, X is halogen, alkylsulfonyloxy, arylsulfonyloxy, or taken together with OR^4 to form an epoxide.

58. (Amended) A method of preparing an (S)-oxazolidinone having a general structural formula:

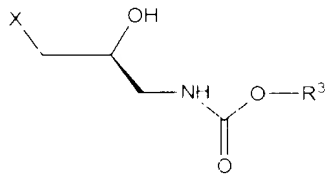


wherein R^1 is C_1-C_{20} alkyl, and R^2 is optionally substituted aryl, or a salt or hydrate thereof, comprising contacting a carbamate having a general structural formula:

$$R^1\text{-NH-CO-O-CH}_2\text{-}R^2$$

wherein R^2 is selected from the group consisting of C_1-C_{20} alkyl, C_3-C_7-cycloalkyl, phenyl optionally substituted with one or two C_1-C_3 alkyl or halogen groups, allyl, 3-methylallyl, 3,3-dimethylallyl, vinyl, styrylmethyl, benzyl optionally substituted on the phenyl with one or two Cl, C_1-C_4 alkyl, nitro, cyano, or trifluoromethyl groups, 9-fluorenylmethyl, trichloromethylmethyl, 2-trimethylsilylethyl, phenylethyl, 1-adamantyl, diphenylmethyl, 1,1-dimethylpropargyl, and isobornyl, or a salt or hydrate thereof, with

i) a secondary alcohol having a general structural formula:

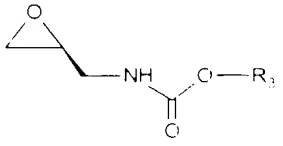


wherein X is halogen, alkylsulfonyloxy, or arylsulfonyloxy, or a salt or hydrate thereof made by the process comprising contacting an (S)-3-carbon amino alcohol having a general structural formula:

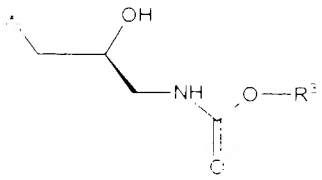
$$X\text{-}CH_2\text{-}C^{*(S)}H(OH)\text{-}CH_2\text{-}NH_3^+$$

with a base and an carbonylating agent selected from the group consisting of a haloformate having a formula R^3O-CO-X and a dialkyldicarbonate having a formula $R^3OCO_2R^3$;

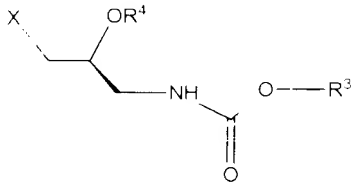
ii) an (S)-epoxide having a general structural formula:



made by the process comprising contacting an (S)-secondary alcohol having a general structural formula:

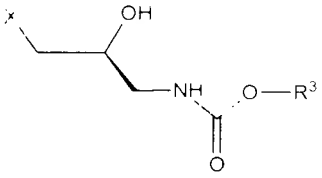


with a base and an acylating agent selected from the group consisting of an acid anhydride having a formula $O(R^4)_2$, and an activated acid having a formula R^4X; or iii) an (S)-ester having a general structural formula:



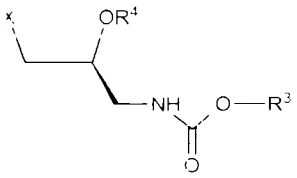
wherein R^4 is C_1-C_5 alkylcarbonyl made by the process comprising contacting

a) an (S)-secondary alcohol having a general structural formula:



wherein X is a halogen, alkylsulfonyloxy, or arylsulfonyloxy; or

b) an (S)-ester having a general structural formula:



wherein R^4 is C_1-C_5 alkylcarbonyl, with a lithium cation and a base whose conjugate acid has a pKa of greater than about 8;

in the presence of a lithium cation and a base whose conjugate acid has a pKa of greater than about 8.